01 INSTALLATION & COMMISSIONING

Bently Nevada 330930-065-00-CN

01 / DEFINE THE CHANNEL BEFORE WORK

Cable under this procedure

Bently Nevada 330930-065-00-CN is a 6.5 m unarmored NSv extension cable. It joins a 0.5 m NSv probe to a matched 7 m Proximitor measurement chain, with the CN approval selection retained.

Read the order code

Base 330930	NSv extension, separate from XL 8 mm cable
AAA065	6.5 m electrical extension
BB00	Unarmored execution
Matched chain	0.5 m NSv probe + 6.5 m extension = 7 m
Suffix CN	Country-specific approval execution

Required electrical-length relationship

Probe	Extension	Proximitor
0.5 m NSv sensing lead	6.5 m 330930 cable	Matched 7 m NSv system

01 Verify the installed chain

Read the probe lead and Proximitor markings before disconnecting hardware. This 6.5 m extension pairs with a 0.5 m NSv probe and the selected 7 m NSv conditioner. Do not shorten, splice or add an undocumented coaxial section to obtain a routing fit.

02 Establish the work boundary

Use the machine isolation and protection procedure before interrupting a monitored channel. Identify the channel and installed target so that reconnection and functional acceptance return the signal to its intended monitor input.

03 Review the approval execution

CN retains a country-specific approval selection. Read the actual component markings and the applicable certificate or control drawing for the installed circuit. An extension-cable suffix alone does not establish the approval of a probe, conditioner or complete channel.

Connect with ApterPower

Phone: +86 180 3023 5313

Email: sales13@apterpower.com

www.apterpower.com

02 / ROUTE THE UNARMORED CABLE

04 Prepare the route

Support the jacket, avoid crushing and persistent connector tension, and maintain the 25.4 mm minimum bend radius. Check both ends of the route for access before fitting the cable.

Recognize the service interface

Minimum Cable Bend Radius	25.4 mm; with or without armor
Connector Material	Gold-plated brass
Recommended Connector Torque	Finger tight
Maximum Connector Torque	0.56 N m
Extension Operating Temperature	-52 to +177 deg C
Extension Storage Temperature	-52 to +177 deg C

05 Inspect the mating connections

Check the mating contacts for dirt, oil and damage. Join the documented connectors finger tight. The 0.56 N m maximum is a limiting value, not a target for routine wrench tightening.

06 Protect the completed junction

BB00 selects an unarmored extension. Route it with mechanical support and select protection suitable for the probe-to-extension connection. Insulate exposed connections from ground under the installation practice. A connector protector, stainless steel armor and the electrical-length option are separate selection decisions.

07 Check separate equipment locations

The extension operates and stores from -52 to +177 deg C. The separate Proximitor operates from -52 to +100 deg C and stores from -52 to +105 deg C. The broad operating limits do not imply identical channel accuracy at every component temperature.

Mechanical acceptance

Proceed when the route is supported, the jacket is undamaged, connectors are seated and selected connection protection suits the local environment. Mechanical inspection is separate from continuity and channel-response checks.

Connect with ApterPower
Phone: +86 180 3023 5313
Email: sales13@apterpower.com
www.apterpower.com

03 / TEST THE ISOLATED EXTENSION

Conductor reference data

Center Conductor Resistance	0.220 ohm/m
Shield Resistance	0.066 ohm/m
Cable Capacitance	69.9 pF/m typical

08 Identify the conductor paths

Disconnect the extension under the equipment procedure and distinguish the center path from the shield. Measure each path end to end on the isolated cable; keep a connected probe or conditioner out of this component check.

Inspection and evidence

Center path	Measure isolated end-to-end center conductor
Shield path	Measure isolated end-to-end shield separately
Mechanical path	Check jacket, support and connector seating
Complete channel	Confirm 7 m system, target calibration and response

09 Resolve unexpected readings

If a reading is questionable, inspect accessible contacts, seating and jacket condition before restoring the channel. The published resistance rates describe cable conductors; a nominal reading alone does not establish target calibration or the monitor response.

Which resistance values apply to checks on 330930-065-00-CN?

The NSv extension rates are 0.220 ohm/m for the center conductor and 0.066 ohm/m for the shield. Measure the isolated conductor paths separately; do not use probe resistance as the extension reading.

How tightly should the connectors on 330930-065-00-CN be joined?

The recommended connector-to-connector practice is finger tight, with 0.56 N m as the maximum. Inspect seating and clean contacts before reconnecting the chain.

Restoration condition

Reconnect only after the component identity and inspection findings agree with the intended channel. Keep the original channel assignment and installation record available for the commissioning stage.

Connect with ApterPower
Phone: +86 180 3023 5313
Email: sales13@apterpower.com
www.apterpower.com

330930-065-00-CN

04 / COMMISSION THE RESTORED NSv CHAIN

10 Restore the seven-metre selection

Rejoin the 0.5 m NSv probe, 6.5 m extension and 7 m NSv Proximitor. Confirm the correct target and the intended channel function before setting static gap or interpreting vibration amplitude.

Static and dynamic reference

Matched System Linear Range	1.5 mm; approximately 0.25 to 1.75 mm
Matched Output Range	Approximately -1 to -13 VDC
Recommended Probe Gap	1.0 mm
Matched Nominal Scale Factor	7.87 V/mm (200 mV/mil)
Matched Frequency Response	0 to 10 kHz; +0 / -3 dB typical

11 Verify conditioner supply

Without barriers the documented Proximitor supply range is -17.5 to -26 VDC; with barriers it is -23 to -26 VDC. Maximum current is 12 mA. Assess these at the conditioner circuit, not as an external power connection to the passive extension.

12 Inspect the monitor field path

The Proximitor-to-monitor field circuit is separate from the probe and extension coaxial path. Its three-conductor shielded triad, conductor sizes and 305 m maximum must be assessed with the published frequency-response curves. Do not add field-wire length to the 7 m sensing-chain sum.

13 Record operating conditions

NSv performance is specified for a complete NSv probe, extension and Proximitor, an AISI 4140 steel target, -24 VDC supply and a 10 kohm load. The normal reference temperature is +18 to +27 deg C unless a performance statement specifies otherwise. Target material, component temperatures and loading therefore belong to channel evaluation.

Release condition

Complete the machine-specific functional test with the intended gap, scale, dynamic response and monitor interpretation. Restore protection under the equipment procedure after documenting the channel result.

Connect with ApterPower
Phone: +86 180 3023 5313
Email: sales13@apterpower.com
www.apterpower.com

05 / HANDOVER AND FUTURE SERVICE

Can the conditioner share the upper cable temperature limit of 330930-065-00-CN?

The extension operates and stores from -52 to +177 deg C. The Proximitor operates to +100 deg C and stores to +105 deg C, so check their separate locations.

Does the CN suffix on 330930-065-00-CN certify every companion component?

It identifies the selected country-specific execution. Verify each installed component marking and the applicable circuit certificate before assigning an approval to the whole measurement channel.

Related proximity products

Bently Nevada 330980-71-00	Related proximity product; check system and options
Bently Nevada 330901-11-25-10-01-00	Related proximity product; check system and options
Bently Nevada 330905-14-19-10-02-05	Related proximity product; check system and options
Bently Nevada 330905-00-07-10-02-05	Related proximity product; check system and options
Bently Nevada 330905-00-05-10-12-CN	Related proximity product; check system and options

Record the service outcome

Retain the complete cable identity, installed probe and conditioner selections, conductor-check results, static gap and completed functional test in the channel record. A future related-product selection requires its own full execution and approval review.

Manufacturer references

3300 XL NSv Proximity Transducer System, Datasheet 147385 Rev. R: extension ordering p. 13; electrical data p. 3; connection practice p. 5; routing and temperatures p. 6. Approvals Quick Reference Guide, Country Specific Ordering Options, 108M1756 Rev. AV: CN selection pp. 10 and 28. These selected facts and field checks support the equipment-specific installation procedure.

Connect with ApterPower

Phone: +86 180 3023 5313

Email: sales13@apterpower.com

www.apterpower.com

330930-065-00-CN